REMARKS/ARGUMENTS

Favorable reconsideration of this application, in view of the present amendments and in light of the following comments, is respectfully requested.

Claims 1-12 are pending in this application, and Claims 1-12 are amended by the present response. It is respectfully submitted that no new matter is added by this amendment.

In the outstanding Office Action, Figures 5-7 were objected to as failing to comply with 37 C.F.R. § 1.84. The Abstract and specification were objected to as including informalities. Claims 1-12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Courtois et al. (U.S. Patent No. 4,979,168, hereinafter "Courtois") in view of Lee et al. (U.S. Patent No. 6,529,520, hereinafter "Lee"). Claim 11 was objected to as it contains the phrase "for example" that renders the claim indefinite.

Applicants thank Examiner Lam for the interview granted Applicants' representatives on June 17, 2004. During the interview, substitute Figures 1-7, the amended Abstract, and an amendment to Claim 1 were discussed. The present response sets forth the discussed claim amendment, substitute figures, abstract, and comments presented to the allowability of the claims over the applied art. The Examiner indicated that the discussed amendment to Claim 1 appeared to clarify the claims over the applied art.

In response to the objection to the drawings, substitute Figures 5-7 including descriptive labels are submitted herewith and it is respectfully requested that this objection be withdrawn. Substitute Figures 1-4 are also submitted that include Background Art labels.

With regard to the objection of the Abstract and specification, the Abstract and specification are amended to correct the informalities specified by the Examiner in paragraphs 3 and 4 of the outstanding Office Action mailed May 21, 2004. Therefore, it is respectfully requested that the objections be withdrawn.

Addressing now the rejection of Claims 1-12 under 35 U.S.C. § 103(a) as unpatentable over Courtois in view of Lee, that rejection is traversed by the present response.

Amended Claim 1 recites a method of random access by a user to an ALOHA type shared resource in which certain time ranges of access to the resource are booked excluding the user from access. More specifically, claim 1 recites "temporarily modifying, when the instant of transmission of a data packet by the user being supplied by at least one first random variable would result in a breach of the booking, said at least one first random variable into a modified second random variable including a same mean and greater variance as the at least one first random variable."

As shown in the non-limiting examples of Figures 5-7, the temporary modification of a random variable into a modified random variable with the same mean and greater variance allows the modified random variable to provide a transmission instant which no longer breaches the booked time ranges. Further, the unchanged mean of the random variable maintains each user's distinct random variable, thereby reducing the dynamic persistence in systems with random access and prior booking of time ranges.[1] The increased variance allows the random variable to provide a transmission instant that no longer breaches the booked time ranges.[2] Further, since the modification of the random variable is temporary, the random variable returns to its initial law after a certain lapse of time or a certain number of iterations. Essentially, the random variable has a variance that varies relative to the booking constraints.[3] The increased variance results in greater flexibility in selecting a transmitting instant that does not conflict with a booked time range.

Courtois is directed towards a controlled CSMA packet switching system of a non-persistent carrier type. In Courtois, if a station senses a channel is busy or the information packet sent by a station is corrupted by a collision with another information packet being

[1] Applicants' specification page 6, lines 25-28.
[2] Applicants' specification at least at page 5, lines 25-31.
[3] Applicants' specification, page 7, lines 29-32.

transmitted by another station, the first station will schedule another time to sense if the channel is busy or idle.[4] More specifically, Courtois is directed to determining the next sensing time using the average load of the channel estimated based on idle periods of the channel, thereby the next sensing time of the channel provides a high likelihood that the channel is idle and available.[5] However, Courtois does not disclose that "at least one first random variable is modified into a modified second random variable including a same mean and a greater variance," as recited in amended Claim 1. In Courtois, a next sensing time is determined based on estimating the idle time of the channel that may result in varying time durations between each sensing time, but Courtois does not disclose a temporary modification of a first random variable that results in a modified second random variable that maintains the random variable mean and has a larger variance than the first random variable, which provides greater flexibility in selecting a transmission instant that does not conflict with prior booking. Further, as stated in the outstanding Office Action Courtois does not disclose that the resource has been the object of a prior booking.[6]

Lee is directed to a method and device for allocating bandwidth dynamically to adapt to changing loads on a shared resource. More specifically, the method and device in Lee determines how each of a stream of transmission frames on a shared channel is to be divided between a contention interval and a data interval so that the bandwidth allocation is efficient and thus reduces transmission delays.[7] The contention interval contains slots that are allocated for reserving transmission times in a current frame or future frames. The data interval contains data slots allocated for the transmission of reserve data packets. Lee merely discloses that if there is a collision of data packets on the reserve channel, the collision will result "in the backing off for an amount of time in accordance with a predetermined

[4] Courtois, column 5, lines 45-50.
[5] Courtois, column 2, line 39 to column 3, line 17.
[6] Office Action mailed May 21, 2004, page 4, lines 1-2.
[7] Lee, column 14, lines 50-65.

contention resolution algorithm until a request can be resent." Lee does not disclose or suggest a specific resolution algorithm.[8] Therefore, Lee does not disclose or suggest that when a transmission instant of a data packet would result in a conflict with a prior booking, a first random variable is temporarily modified into a second modified random variable including a same mean and greater variance than the first random variable, as recited in amended Claim 1.

Therefore, as neither Courtois nor Lee, either alone or in combination, discloses or suggests the features of amended Claim 1 as discussed above, it is respectfully requested that the rejection of amended Claim 1 be withdrawn. Likewise, it is respectfully submitted that Claims 2-12 that depend from amended Claim 1 are allowable for at least the same reasons as discussed above with respect to amended Claim 1.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested this case be passed to issue.

Respectfully submitted,

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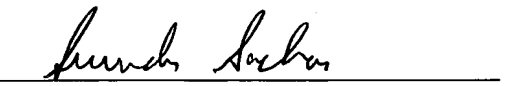

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[8] Lee, column 11, lines 25-33.